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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,103

01/12/2006

Antonio Pita-Szczesniewski

206,879

2652

7590 01/22/2009
ABELMAN, FRAYNE & SCHWAB
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666 Third Ave.
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EXAMINER

NGUYEN, PHU HOANG

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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01/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,103	Applicant(s) PITA-SZCZESNIEWSKI, ANTONIO	
	Examiner PHU H. NGUYEN	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement is made of Amendment received 11/05/2008. Claim 1 is currently amended. Claims 5-6 are previously presented. Claims 2-4 are cancelled.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/05/2008 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the velocity of the calcinations process, the decarbonization grade of the batch and the formation of the desired crystalline structures" in lines 12-14. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szczesniewski et al. (U.S Patent No. 6358870) in view of Bair (U.S Patent No. 2220750).

Regarding claims 1, Szczesniewski discloses a method for preparing pre-reacted synthetic batches, with a low content of carbon dioxide, for the production of glass formulas, comprising the steps of:

mixing raw materials, minerals, partially treated minerals, intermediate products thereof or compounds, containing molecular systems selected from the group consisting of silica-sodium, silica-sodium-calcium, silica-sodium-magnesium, silica-calcium-magnesium, silica-sodium-calcium-magnesium, and mixtures thereof, in stoichiometric amounts selected from one or more invariant points or points on a line connecting invariant points from a phase diagram; and

calcining the mixture at reaction temperatures which do not form a liquid phase and release CO₂ to produce said pre-reacted and carbon dioxide-free synthetic compound that totally saturates the sodium, sodium and calcium, or the sodium, calcium and magnesium of a molecular glass formula (claim 1 of Szczesniewski).

However, Szczesniewski does not expressly disclose the step of adding cullet as recited in the instant claim 1. Bair discloses in the formation of glass by conventional

methods, a dry mixture of coarse sand, fluxes such as soda ash and lime and enough of glass (about 20 or 25%) as cullet (column 1, line 24-29). Bair further discloses the mass (corresponding to the claimed "agglomerated") can be mulled to form nodules, or can be formed into briquettes by suitable methods. These briquettes can then be dried to coherent state eminently suited for use in the formation of glass (column 2, line 41-51). It is an inherent property of cullet to permits heat penetration (heat penetrating an object from the outer surface toward the center during heating) within the mixture of raw materials which is absorbed toward the center of the mixture. Therefore, it would have been obvious to one of ordinary skill in the art to add available cullet to the raw material which contains the molecular systems taught by Szczesniewski in process of making glass to save on cost of raw material.

Regarding claim 6, Szczesniewski further discloses the content of carbon dioxide in the pre-reacted batches can be between 1 and .5% by weight after 25 minutes of treatment (figure 3). Accordingly, claim 6 is rejected.

Response to Arguments

Applicant's arguments filed 11/28/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that reference of Bair (U.S Patent No. 2220750) is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24

USPQ2d 1443 (Fed. Cir. 1992). In this case, both Szczesniewski and Bair are in the field of the applicant's endeavor of producing glass formulas wherein the raw materials for a specific molecular glass formula melt to form the desired glass.

In response to applicant's argument that the applicant has a different reason for combining, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Applicant essentially argues that the intended use of glass cullet is to increase the efficiency of the heat transfer process and never used to promote fusing and never melts. However, as discussed above in the rejection, the combination of Szczesniewski and Bair also teaches calcining the batch to a reaction temperature which does not form a liquid phase and adding a percent of cullet to the raw materials.

Applicant further argues that the application does not disclose or mention in the application concerns of a "process of making glass". However, it is noted that the application shows concern about a process of making glass at least in the Abstract and the Title wherein they contain phrase "the production of glass formulas" (corresponding to a process of making glass).

Applicant also argues that the intended use of glass cullet is a heat transfer agent rather than a fluxing agent. However, the combination of Szczesniewski and Bair discloses the adding of cullet to a batch of raw materials and the calcining process

which does not form a liquid phase which inherently act as a heat transfer agent during the calcining process.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHU H. NGUYEN whose telephone number is (571)272-5931. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip Tucker can be reached on 571-272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N 1/13/2009

***/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791***